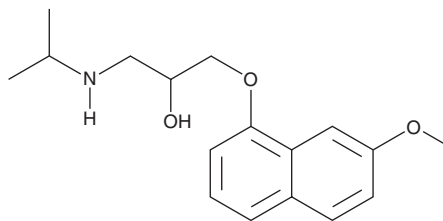


PRODUCT INFORMATION



rac-7-methoxy Propranolol Item No. 17576

CAS Registry No.: 76275-53-1
Formal Name: 1-[(7-methoxy-1-naphthalenyl)oxy]-3-[(1-methylethyl)amino]-2-propanol
MF: C₁₇H₂₃NO₃
FW: 289.4
Purity: ≥95%
UV/Vis.: λ_{max}: 220, 236, 280 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

rac-7-methoxy Propranolol is supplied as a crystalline solid. A stock solution may be made by dissolving the *rac*-7-methoxy propranolol in the solvent of choice, which should be purged with an inert gas. *rac*-7-methoxy Propranolol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of *rac*-7-methoxy propranolol in ethanol and DMSO is approximately 30 mg/ml and approximately 50 mg/ml in DMF.

rac-7-methoxy Propranolol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, *rac*-7-methoxy propranolol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. *rac*-7-methoxy Propranolol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Propranolol, one of the first β-blockers used in cardiovascular medicine, inhibits β₁-, β₂-, and β₃-adrenergic receptors with log KD values of -8.16, -9.08, and -6.93, respectively.^{1,2} Ring-hydroxylated isomers of propranolol also antagonize β-adrenergic receptors and demonstrate potent vasodilator activity.³ *rac*-7-methoxy Propranolol is an intermediate for the preparation of *rac*-7-hydroxy propranolol.

References

1. Baker, J.G. The selectivity of β-adrenoceptor antagonists at the human β₁, β₂ and β₃ adrenoceptors. *Br. J. Pharmacol.* **144**(3), 317-322 (2005).
2. Mehvar, R. and Brocks, D.R. Stereospecific pharmacokinetics and pharmacodynamics of β-adrenergic blockers in humans. *J. Pharm. Pharm. Sci.* **4**(2), 185-200 (2001).
3. Oatis, J.E., Jr., Russell, M.P., Knapp, D.R., et al. Ring-hydroxylated propranolol: Synthesis and β-receptor antagonist and vasodilating activities of the seven isomers. *J. Med. Chem.* **24**, 309-314 (1981).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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